US-41 RECONSTRUCTION HOUGHTON: 2021-2022



PROJECT OVERVIEW



PROJECT LIMITS



- Townsend Drive, College Avenue,
 Franklin Square, and east end of
 Montezuma Avenue
- Design:October 2018 October 2020
- **Construction:** 2021 2022
- Construction cost: \$9 million
- Federal and state road preservation funds, city and USDA
- City work: Sanitary sewer and water main upgrades

PROJECT DETAILS





PROJECT TIMELINE





Pavement condition

- Townsend Drive constructed in 1969
- Montezuma Avenue previously reconstructed in 1964 and 1976



Right-size the road

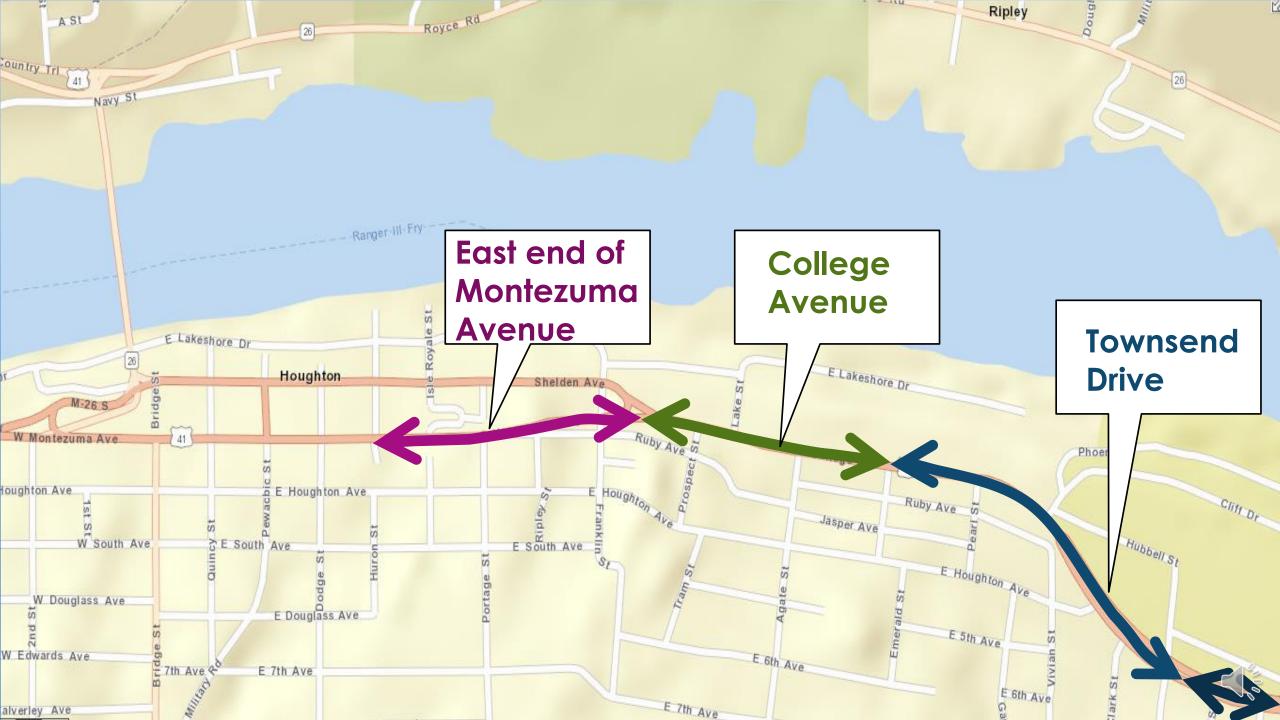
- 20-year (2041) traffic projections
- Average daily traffic ranges from 14,900 to 16,600 vehicles per day
- 2 to 3 percent commercial

PROJECT NEED



LANE RECONFIGURATION





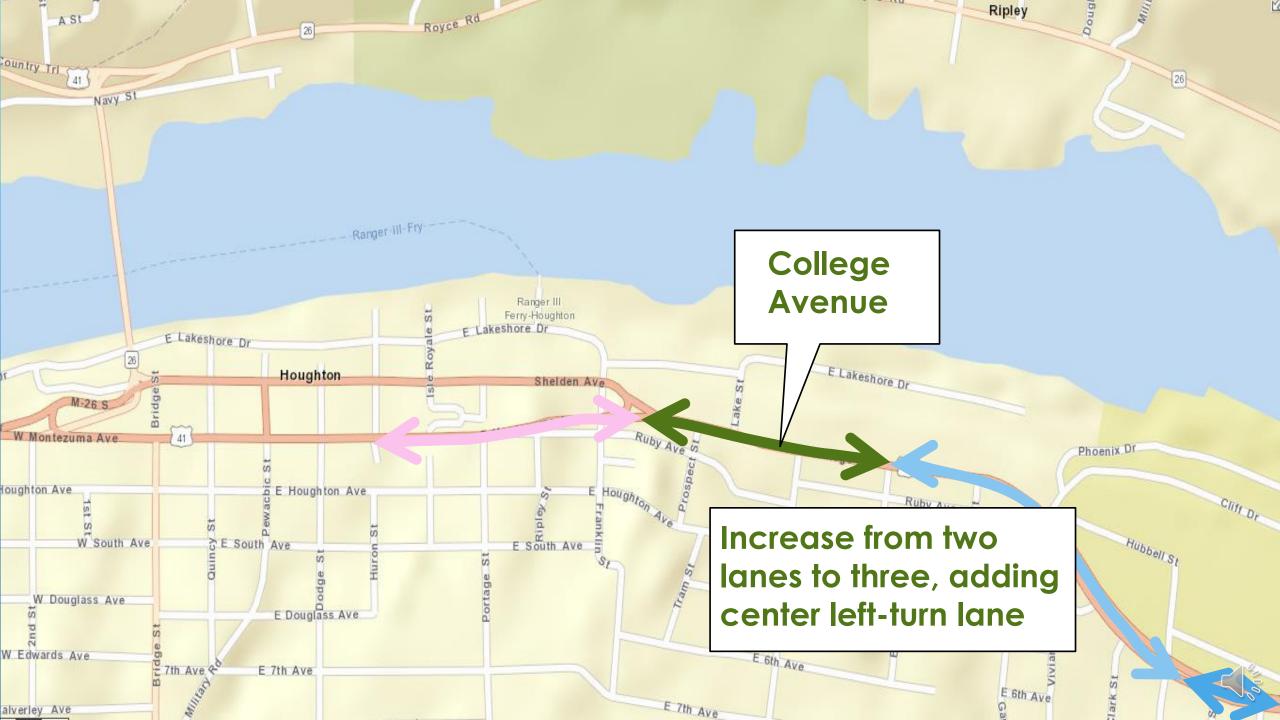


East Montezuma Avenue









College Avenue

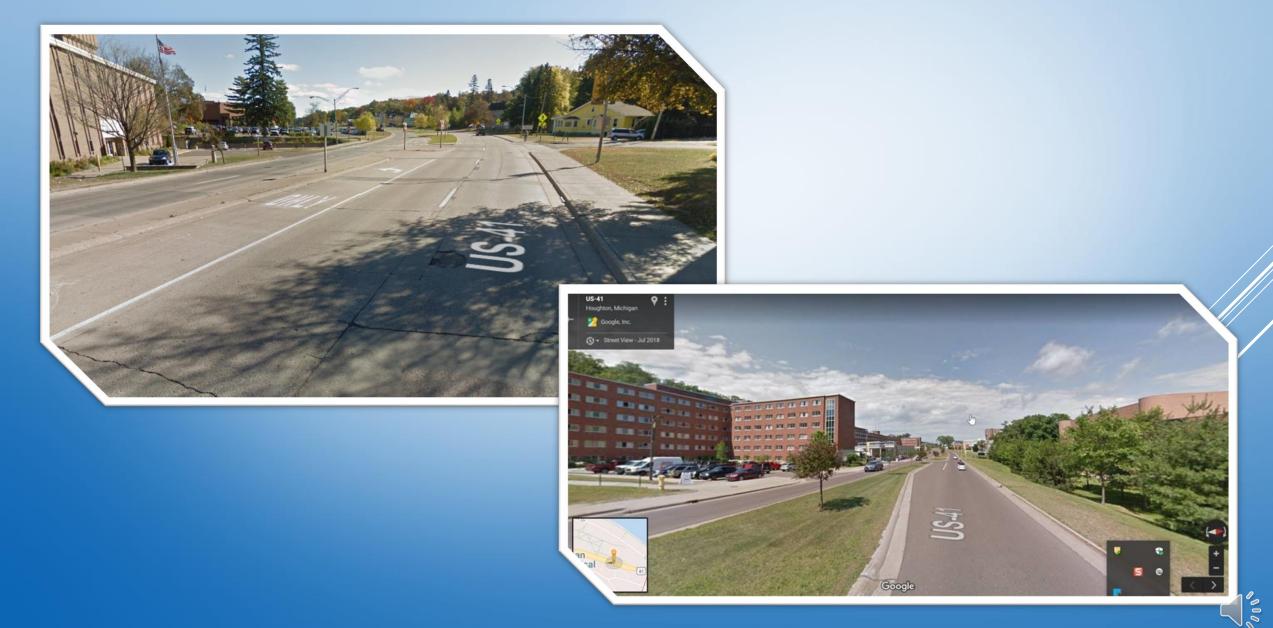








Townsend Drive



Townsend Drive at MacInnes Drive





WHY LANE REDUCTIONS?



Removing unnecessary lanes promotes better traffic flow



Improves pedestrian crossing safety



Build and maintain only what is needed



OTHER FEATURES



- Connectivity created between E. Montezuma Avenue and College Avenue by elimination of traffic lane and replacement with concrete sidewalk.
- ▶ New crosswalk at west end of College Avenue.

PEDESTRIAN IMPROVEMENTS



Reduction on College Avenue and Townsend Drive near Cliff Drive allows for wider sidewalk, promoting continuity from College Avenue directly to MTU campus.

PEDESTRIAN IMPROVEMENTS



Marked pedestrian crosswalks will be placed at high-volume entrances to MTU campus with median refuges created for safety.

PEDESTRIAN IMPROVEMENTS



HISTORIC PROPERTIES AND CONSIDERATIONS

Design challenges: minimizing or avoiding impacts on the many historic features along the corridor.





Light standards will be salvaged.



HISTORIC PROPERTIES AND CONSIDERATIONS

- ▶ Thorough review of right-of-way (ROW) purchases.
- ▶ No adverse impacts on the properties.
- ▶ Several properties with potential historic significance.





MUNICIPAL UTILITY UPGRADES







- ► Coordination: Ensures an aging system won't fail beneath new pavement.
- ▶ Sanitary sewer and water main upgrades: \$2.5 million.
- ► Majority of funding through USDA Rural Development.
- ► Aging system: roughly 100 years old in places!
- ▶ 5,395 feet of new water main; 4,435 feet of new sanitary sewer.



STORM SEWER/DRAINAGE IMPROVEMENTS







- ▶ New storm sewer, catch basins and manholes.
- ▶ 64 new drainage structures to reduce ponding and improve safety.
- ▶ Upsized system for increased capacity.
- ▶ Improved capture of pollutants.



MAINTAINING TRAFFIC



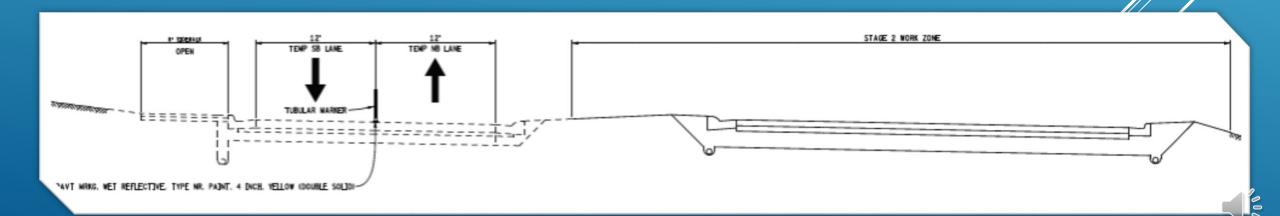
Reconstruction of Townsend Drive

► <u>Stage1</u>

Temporary paving and prep for Stage 2.

► Stage 2

Both directions of traffic shifted to southbound roadbed. Reconstruct the northbound roadway section.



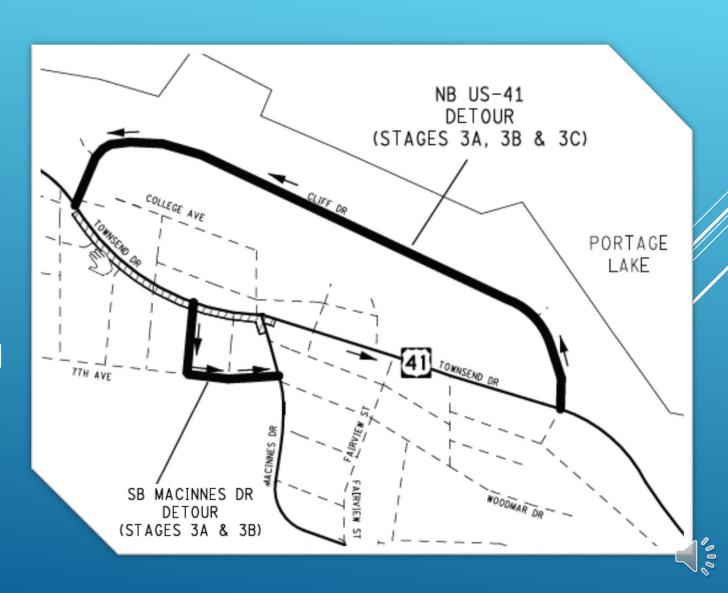
Reconstruction of Townsend Drive

► Stage 3

Northbound traffic detoured onto Cliff Drive.

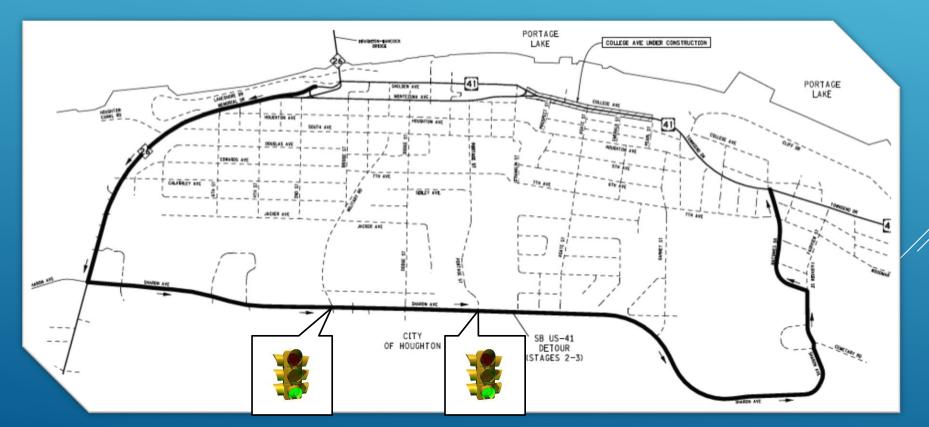
Reconstruction of the southbound roadway section.

MacInnes Drive constructed in multiple stages.



Reconstruction of College Avenue, Montezuma Avenue, and Franklin Square

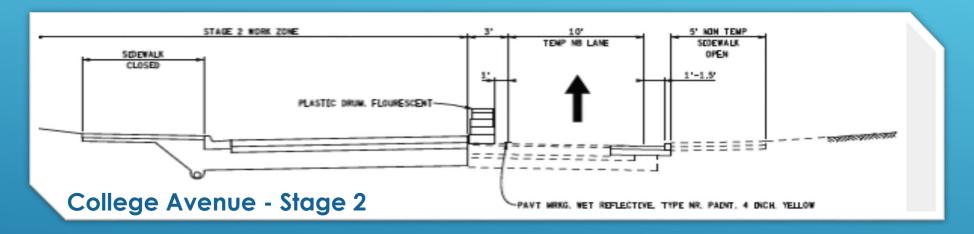
- ► Southbound US-41 detour
- ▶ Local traffic maintained, Montezuma Avenue to Shelden Avenue
- ► Temporary traffic signals

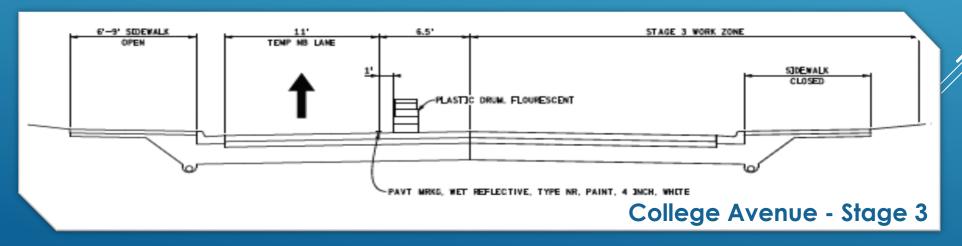




Reconstruction of College Avenue, Montezuma Avenue, and Franklin Square

Northbound traffic will be maintained at all times.







CONTACT AND FEEDBACK



Looking for a printed copy of this presentation? Want more detailed project drawings? Would you like to provide feedback?

E-mail: MDOT-Houghton2021@Michigan.gov

Website: US-41 Houghton Reconstruction

Online feedback: <u>Comment form</u>





